

\$%^STN;highlighton= ***;highlightoff=***

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1800EXS

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America
NEWS 2 "Ask CAS" for self-help around the clock
NEWS 3 JUL 12 BEILSTEIN enhanced with new display and select options, resulting in a closer connection to BABS
NEWS 4 AUG 02 IFIPAT/IFIUDB/IFICDB reloaded with new search and display fields
NEWS 5 AUG 02 CPlus and CA patent records enhanced with European and Japan Patent Office Classifications
NEWS 6 AUG 02 The Analysis Edition of STN Express with Discover! (Version 7.01 for Windows) now available
NEWS 7 AUG 27 BIOCOMMERCE: Changes and enhancements to content coverage
NEWS 8 AUG 27 BIOTECHABS/BIOTECHDS: Two new display fields added for legal status data from INPADOC
NEWS 9 SEP 01 INPADOC: New family current-awareness alert (SDI) available
NEWS 10 SEP 01 New pricing for the Save Answers for SciFinder Wizard within STN Express with Discover!
NEWS 11 SEP 01 New display format, HITSTR, available in WPIDS/WPINDEX/WPIX
NEWS 12 SEP 27 STANDARDS will no longer be available on STN
NEWS 13 SEP 27 SWETSCAN will no longer be available on STN
NEWS 14 OCT 28 KOREAPAT now available on STN

NEWS EXPRESS OCTOBER 29 CURRENT WINDOWS VERSION IS V7.01A, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 11 AUGUST 2004
NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS INTER General Internet Information
NEWS LOGIN Welcome Banner and News Items
NEWS PHONE Direct Dial and Telecommunication Network Access to STN

Enter NEWS followed by the item number or name to see news on that

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

ETLE 'HOME' ENTERED AT 19:34:40 ON 09 NOV 2004

=> file eliz

→ The e_{H2}
COST IN U. S. DOLLARS

SINCE FILE TOTAL
ENTRY SESSION
0 21 0 21

FILE 'MEDLINE' ENTERED AT 10:34:51 ON 09 NOV 2004

FILE 'SCISEARCH' ENTERED AT 19:34:51 ON 09 NOV 2004
Copyright (c) 2004 The Thomson Corporation

FILE 'LIFESCI' ENTERED AT 19:34:51 ON 09 NOV 2004
COPYRIGHT (C) 2004 Cambridge Scientific Abstracts (CSA)

FILE 'BIOTECHDS' ENTERED AT 19:34:51 ON 09 NOV 2004
COPYRIGHT (C) 2004 THE THOMSON CORPORATION

FILE 'BIOSIS' ENTERED AT 19:34:51 ON 09 NOV 2004
Copyright (c) 2004 The Thomson Corporation.

FILE 'EMBASE' ENTERED AT 19:34:51 ON 09 NOV 2004
COPYRIGHT (C) 2004 Elsevier Inc. All rights reserved.

FILE 'HCAPLUS' ENTERED AT 19:34:51 ON 09 NOV 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'NTIS' ENTERED AT 19:34:51 ON 09 NOV 2004
Compiled and distributed by the NTIS, U.S. Department of Commerce.
It contains copyrighted material.
All rights reserved. (2004)

FILE 'ESBIOBASE' ENTERED AT 19:34:51 ON 09 NOV 2004
COPYRIGHT (C) 2004 Elsevier Science B.V., Amsterdam. All rights reserved.

FILE 'BIOTECHNO' ENTERED AT 19:34:51 ON 09 NOV 2004
COPYRIGHT (C) 2004 Elsevier Science B.V., Amsterdam. All rights reserved.

FILE 'WPIDS' ENTERED AT 19:34:51 ON 09 NOV 2004
COPYRIGHT (C) 2004 THE THOMSON CORPORATION

=> s pyruvate carboxylase
L1 9511 PYRUVATE CARBOXYLASE

=> s 11 (5a) aspart?
L2 190 L1 (5A) ASPART?

=> s 12 (5a) inhibit?
10 FILES SEARCHED...
L3 26 L2 (5A) INHIBIT?

=> dup rem 13
PROCESSING COMPLETED FOR L3
L4 10 DUP REM L3 (16 DUPLICATES REMOVED)

=> d 1-10

L4 ANSWER 1 OF 10 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
DUPLICATE 1
AN 2002-16323 BIOTECHDS
TI Novel mutated, feedback resistant pyruvate carboxylase enzyme
polypeptide, useful for producing amino acids e.g. L-lysine, L-threonine,
L-glycine, L-glutamic acid, L-proline and L-methionine and L-isoleucine;
plasmid-mediated recombinant enzyme gene transfer and expression in
Corynebacterium sp.
AU HANKE P D
PA ARCHER-DANIELS MIDLAND CO
PI WO 2002031158 18 Apr 2002
AI WO 2000-US31893 13 Oct 2000
PRAI US 2000-239913 13 Oct 2000
DT Patent
LA English
OS WPI: 2002-463267 [49]

L4 ANSWER 2 OF 10 MEDLINE on STN DUPLICATE 2
AN 2002646773 MEDLINE
DN PubMed ID: 12406733
TI Effect of pyruvate carboxylase overexpression on the physiology of
Corynebacterium glutamicum.
AU Koffas Mattheos A G; Jung Gyoo Yeol; Aon Juan C; Stephanopoulos Gregory
CS Department of Chemical Engineering, Massachusetts Institute of Technology,
Cambridge, Massachusetts 02139, USA.
SO Applied and environmental microbiology, (2002 Nov) 68 (11) 5422-8.
Journal code: 7605801. ISSN: 0099-2240.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200212
ED Entered STN: 20021031
Last Updated on STN: 20021218
Entered Medline: 20021217

L4 ANSWER 3 OF 10 WPIDS COPYRIGHT 2004 THE THOMSON CORP on STN
AN 1995-106843 [14] WPIDS

DNC C1995-048689

TI Variant of phospho-enol ***pyruvate*** ***carboxylase*** - not
substantially ***inhibited*** by ***aspartic*** acid, is used for
efficient production of amino acids.

DC B04 B05 D16 E19

IN IZUI, K; MATSUI, H; SUGIMOTO, M; SUZUKI, T; HIROSHI, M; MASAKAZU, S;
TOMOKO, S; TOYAMA, T; MATSUI, H H

PA (AJIN) AJINOMOTO KK

CYC 32

PI WO 9506114 A1 19950302 (199514)* JA 77 C12N009-88

RW: AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

W: AU BR CA CN CZ HU KR PL RU SK US VN

AU 9480991 A 19950321 (199526) C12N009-88

JP 07111890 A 19950502 (199526) 16 C12N009-00

JP 08070860 A 19960319 (199621) 26 C12N009-00

CZ 9600524 A3 19960612 (199631) C12N009-88

EP 723011 A1 19960724 (199634) EN 50 C12N009-88

R: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

SK 9600204 A3 19961106 (199702) C12N009-88

BR 9407625 A 19970121 (199710) C12N009-88

AU 682547 B 19971009 (199749) C12N009-88

CN 1133615 A 19961016 (199802) C12N009-88

EP 723011 A4 19970101 (199841) C12N009-88

US 5876983 A 19990302 (199916) C12P013-04

US 5919694 A 19990706 (199933) C07H021-04

JP 3013711 B2 20000228 (200015) 16 C12N009-00

RU 2133772 C1 19990727 (200030) C12N009-88

MX 195842 B 20000404 (200124) C07H021-004

HU 219600 B 20010528 (200140) C12N009-88

CZ 289051 B6 20011017 (200172) C12N009-88

EP 723011 B1 20020703 (200243) EN C12N009-88

R: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

DE 69430919 E 20020808 (200259) C12N009-88

KR 337959 B 20021123 (200333) C12N009-88

SK 283369 B6 20030603 (200345) C12N009-88

PH 1199448842 B1 20020416 (200382) C12N015-00

ADT WO 9506114 A1 WO 1994-JP1365 19940817; AU 9480991 A AU 1994-80991
19940817; JP 07111890 A JP 1994-196777 19940822; JP 08070860 A JP
1994-196778 19940822; CZ 9600524 A3 CZ 1996-524 19940817; EP 723011 A1 EP
1994-924384 19940817, WO 1994-JP1365 19940817; SK 9600204 A3 WO
1994-JP1365 19940817, SK 1996-204 19940817; BR 9407625 A BR 1994-7625
19940817, WO 1994-JP1365 19940817; AU 682547 B AU 1994-80991 19940817; CN
1133615 A CN 1994-193905 19940817; EP 723011 A4 EP 1994-924384 19940817;
US 5876983 A WO 1994-JP1365 19940817, US 1996-596366 19960429; US 5919694
A Div ex WO 1994-JP1365 19940817, Div ex US 1996-596366 19960429, US
1997-967104 19971110; JP 3013711 B2 JP 1994-196777 19940822; RU 2133772 C1
WO 1994-JP1365 19940817, RU 1996-107112 19940817; MX 195842 B MX 1994-6418
19940823; HU 219600 B WO 1994-JP1365 19940817, HU 1996-240 19940817; CZ
289051 B6 WO 1994-JP1365 19940817, CZ 1996-524 19940817; EP 723011 B1 EP
1994-924384 19940817, WO 1994-JP1365 19940817; DE 69430919 E DE
1994-630919 19940817, EP 1994-924384 19940817, WO 1994-JP1365 19940817; KR
337959 B WO 1994-JP1365 19940817, KR 1996-700741 19960214; SK 283369 B6 WO
1994-JP1365 19940817, SK 1996-204 19940817; PH 1199448842 B1 PH 1994-48842
19940823

FDT AU 9480991 A Based on WO 9506114; EP 723011 A1 Based on WO 9506114; BR
9407625 A Based on WO 9506114; AU 682547 B Previous Publ. AU 9480991,
Based on WO 9506114; US 5876983 A Based on WO 9506114; JP 3013711 B2
Previous Publ. JP 07111890; RU 2133772 C1 Based on WO 9506114; HU 219600 B
Previous Publ. HU 73690, Based on WO 9506114; CZ 289051 B6 Previous Publ.
CZ 9600524, Based on WO 9506114; EP 723011 B1 Based on WO 9506114; DE
69430919 E Based on EP 723011, Based on WO 9506114; KR 337959 B Previous
Publ. KR 96704029, Based on WO 9506114; SK 283369 B6 Previous Publ. SK
9600204, Based on WO 9506114

PRAI JP 1993-209775 19930824; JP 1993-209776 19930824;

JP 1994-153876 19940705

IC ICM C07H021-004; C07H021-04; C12N009-00; C12N009-88; C12N015-00;
C12P013-04

ICS C12N001-020; C12N001-20; C12N001-21; C12N009-18; C12N015-03;
C12N015-11; C12N015-52; C12P013-06; C12P013-08; C12P013-10;
C12P013-12; C12P013-14; C12P013-24

ICA C12N015-09

ICI C12N001-21, C12R001:01; C12N001-21, C12R001:185; C12N009-00, C12R001:01;
C12N009-00, C12R001:185; C12P013-06, C12R001:185; C12P013-06,

C12R001:01; C12P013-08, C12R001:185; C12P013-08, C12R001:01;
C12P013-10, C12R001:185; C12P013-10, C12R001:01; C12P013-12,
C12R001:185; C12P013-14, C12R001:185; C12P013-14, C12R001:01;
C12P013-24, C12R001:185; C12P013-24, C12R001:01; C12N009-00,
C12R001:185; C12N009-00, C12R001:01; C12N001-21, C12R001:185;
C12N001-21, C12R001:01; C12N015-09, C12R001:185; C12P013-06,
C12R001:185; C12P013-06, C12R001:01; C12P013-08, C12R001:185;
C12P013-08, C12R001:01; C12N009-00, C12R001:185; C12N009-00,
C12R001:01; C12N015-09, C12R001:185

L4 ANSWER 4 OF 10 MEDLINE on STN DUPLICATE 3
AN 89374349 MEDLINE
DN PubMed ID: 2775312
TI Potentiation of benzoate toxicity by glyoxylate. Inhibition of pyruvate
carboxylase and the urea cycle.
AU Cyr D M; Tremblay G C
CS Department of Biochemistry and Biophysics, University of Rhode Island,
Kingston 02881.
NC DK33536 (NIDDK)
SO Biochemical pharmacology, (1989 Sep 1) 38 (17) 2919-23.
Journal code: 0101032. ISSN: 0006-2952.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 198909
ED Entered STN: 19900309
Last Updated on STN: 19900129
Entered Medline: 19890927

L4 ANSWER 5 OF 10 MEDLINE on STN DUPLICATE 4
AN 88139221 MEDLINE
DN PubMed ID: 3325498
TI Regulation of reductive production of succinate under anaerobic conditions
in baker's yeast.
AU Muratsubaki H
CS Department of Clinical Biochemistry, Faculty of Health science, Kyorin
University, Tokyo.
SO Journal of biochemistry, (1987 Oct) 102 (4) 705-14.
Journal code: 0376600. ISSN: 0021-924X.
CY Japan
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 198803
ED Entered STN: 19900308
Last Updated on STN: 19900308
Entered Medline: 19880325

L4 ANSWER 6 OF 10 MEDLINE on STN DUPLICATE 5
AN 86164336 MEDLINE
DN PubMed ID: 3514213
TI Pyruvate carboxylase from *Saccharomyces cerevisiae*. Quaternary structure,
effects of allosteric ligands and binding of avidin.
AU Rohde M; Lim F; Wallace J C
SO European journal of biochemistry / FEBS, (1986 Apr 1) 156 (1) 15-22.
Journal code: 0107600. ISSN: 0014-2956.
CY GERMANY, WEST: Germany, Federal Republic of
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 198605
ED Entered STN: 19900321
Last Updated on STN: 19900321
Entered Medline: 19860519

L4 ANSWER 7 OF 10 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on
STN
AN 1982:255011 BIOSIS
DN PREV198274027491; BA74:27491
TI EFFECT OF SALT STRESS ON THE STRUCTURE AND CARBON FLOW MECHANISM IN A
NOXIOUS WEED PARTHENIUM-HYSTEROPHORUS.
AU HEGDE B A [Reprint author]; PATIL T M
CS DEP BOTANY, SHIVAJI UNIV, KOLHAPUR 416004, INDIA
SO Weed Research, (1982) Vol. 22, No. 1, pp. 51-56.
CODEN: WEREAT. ISSN: 0043-1737.

DT Article
FS BA
LA ENGLISH

L4 ANSWER 8 OF 10 HCPLUS COPYRIGHT 2004 ACS on STN
AN 1971:506589 HCPLUS
DN 75:106589
TI Reaction mechanism and regulation of pyruvate carboxylase in *Penicillium camemberti*
AU Stan, H. J.
CS Inst. Lebensmittelchem. Lebensmitteltechnol., Tech. Uni., Berlin, Fed. Rep. Ger.
SO Ernaehrungs-Umschau (1971), 18(6), 257-8
CODEN: ERUMAT; ISSN: 0174-0008
DT Journal
LA German

L4 ANSWER 9 OF 10 MEDLINE on STN
AN 67178602 MEDLINE
DN PubMed ID: 5970498
TI ***Inhibition*** of yeast ***pyruvate*** ***carboxylase*** by L- ***aspartate*** and oxaloacetate.
AU Palacian E; de Torrontegui G; Losada M
SO Biochemical and biophysical research communications, (1966 Sep 8) 22 (5) 644-9.
Journal code: 0372516. ISSN: 0006-291X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 196709
ED Entered STN: 19900101
Last Updated on STN: 19970203
Entered Medline: 19670907

L4 ANSWER 10 OF 10 HCPLUS COPYRIGHT 2004 ACS on STN
AN 1966:484246 HCPLUS
DN 65:84246
OREF 65:15824f-g
TI ***Inhibition*** of yeast ***pyruvate*** ***carboxylase*** by L- ***aspartate*** and oxaloacetate.
AU Palacian, E.; de Torrontegui, G.; Losada, M.
CS Inst. Biol. Celular, Madrid
SO Biochemical and Biophysical Research Communications (1966), 24(5), 644-9
CODEN: BBRCA9; ISSN: 0006-291X
DT Journal
LA English

=> d 9, 10 ab

L4 ANSWER 9 OF 10 MEDLINE on STN

L4 ANSWER 10 OF 10 HCPLUS COPYRIGHT 2004 ACS on STN
AB L-Aspartate (noncompetitively) and oxaloacetate (competitively) inhibited bakers' yeast pyruvate carboxylase. Since the oxalacetate formed by the carboxylation of pyruvate in yeast can be removed for the synthesis of aspartate, pyruvate carboxylase can be regarded as the 1st enzyme of the pathway leading from pyruvate to aspartate. The ***inhibition*** of ***pyruvate*** ***carboxylase*** activity by L- ***aspartate*** might be considered an allosteric ***inhibition*** by end-product, and might be important in the regulation of the oxalacetate level within the cell.

=> dis his

(FILE 'HOME' ENTERED AT 19:34:40 ON 09 NOV 2004)

FILE 'MEDLINE, SCISEARCH, LIFESCI, BIOTECHDS, BIOSIS, EMBASE, HCPLUS, NTIS, ESBIOBASE, BIOTECHNO, WPIDS' ENTERED AT 19:34:51 ON 09 NOV 2004
L1 9511 S PYRUVATE CARBOXYLASE
L2 190 S L1 (5A) ASPART?
L3 26 S L2 (5A) INHIBIT?
L4 10 DUP REM L3 (16 DUPLICATES REMOVED)

=> log h
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	27.37	27.58

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-0.70	-0.70

SESSION WILL BE HELD FOR 60 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 19:38:12 ON 09 NOV 2004

WEST Search History

DATE: Tuesday, November 09, 2004

<u>Hide?</u>	<u>Set Name</u>	<u>Query</u>	<u>Hit Count</u>
<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; PLUR=YES; OP=ADJ</i>			
<input type="checkbox"/>	L3	L2 with inhibition	11
<input type="checkbox"/>	L2	L1 with aspart\$	180
<input type="checkbox"/>	L1	pyruvate carboxylase	908

END OF SEARCH HISTORY

Hit List

[Clear](#) [Generate Collection](#) [Print](#) [Fwd Refs](#) [Bkwd Refs](#)
[Generate OACs](#)

Search Results - Record(s) 1 through 10 of 11 returned.

1. Document ID: US 20030103935 A1

Using default format because multiple data bases are involved.

L3: Entry 1 of 11

File: PGPB

Jun 5, 2003

PGPUB-DOCUMENT-NUMBER: 20030103935
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030103935 A1

TITLE: Soluble variants of type I membrane proteins, and methods of using them

PUBLICATION-DATE: June 5, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Linnenbach, Alban J.	Philadelphia	PA	US	
Koprowski, Hilary	Wynnewood	PA	US	
Herlyn, Dorothee	Wynnewood	PA	US	

US-CL-CURRENT: 424/85.1; 424/185.1, 424/85.2, 424/85.4

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#) [Claims](#) [KIN](#) [Draw](#)

2. Document ID: US 20030087381 A1

L3: Entry 2 of 11

File: PGPB

May 8, 2003

PGPUB-DOCUMENT-NUMBER: 20030087381
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030087381 A1

TITLE: Metabolically engineered organisms for enhanced production of oxaloacetate-derived biochemicals

PUBLICATION-DATE: May 8, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Gokarn, Ravi R.	Plymouth	MN	US	
Eiteman, Mark A.	Athens	GA	US	
Altman, Elliot	Athens	GA	US	

US-CL-CURRENT: 435/69.1; 435/193, 435/252.3, 435/252.33, 435/320.1, 536/23.2

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KMC](#) | [Drawn Ds](#)

3. Document ID: US 20020177202 A1

L3: Entry 3 of 11

File: PGPB

Nov 28, 2002

PGPUB-DOCUMENT-NUMBER: 20020177202

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020177202 A1

TITLE: Feedback-resistant pyruvate carboxylase gene from corynebacterium

PUBLICATION-DATE: November 28, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Hanke, Paul D.	Aurora	IL	US	

US-CL-CURRENT: 435/189; 435/193, 435/320.1, 435/325, 435/69.1, 536/23.2

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KMC](#) | [Drawn Ds](#)

4. Document ID: US 6645498 B1

L3: Entry 4 of 11

File: USPT

Nov 11, 2003

US-PAT-NO: 6645498

DOCUMENT-IDENTIFIER: US 6645498 B1

TITLE: Soluble variants of type I membrane proteins, and methods of using them

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KMC](#) | [Drawn Ds](#)

5. Document ID: US 6455284 B1

L3: Entry 5 of 11

File: USPT

Sep 24, 2002

US-PAT-NO: 6455284

DOCUMENT-IDENTIFIER: US 6455284 B1

TITLE: Metabolically engineered E. coli for enhanced production of oxaloacetate-derived biochemicals

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KMC](#) | [Drawn Ds](#)

6. Document ID: US 5766925 A

DERWENT-ACC-NO: 2002-463267

DERWENT-WEEK: 200409

COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Novel mutated, feedback resistant pyruvate carboxylase enzyme polypeptide, useful for producing amino acids e.g. L-lysine, L-threonine, L-glycine, L-glutamic acid, L-proline and L-methionine and L-isoleucine

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Text](#) | [Image](#) | [Claims](#) | [KINIC](#) | [Drawn](#) | [Def](#)

[Clear](#)[Generate Collection](#)[Print](#)[Fwd Refs](#)[Bkwd Refs](#)[Generate OACS](#)

Terms	Documents
L2 with inhibition	11

Display Format:

[Previous Page](#)[Next Page](#)[Go to Doc#](#)

Hit List

Clear**Generate Collection****Print****Fwd Refs****Bkwd Refs****Generate OACS**

Search Results - Record(s) 11 through 11 of 11 returned.

11. Document ID: PH 1199448842 B1, WO 9506114 A1, AU 9480991 A, JP 07111890 A, JP 08070860 A, CZ 9600524 A3, EP 723011 A1, SK 9600204 A3, BR 9407625 A, AU 682547 B, CN 1133615 A, EP 723011 A4, US 5876983 A, US 5919694 A, JP 3013711 B2, RU 2133772 C1, MX 195842 B, HU 219600 B, CZ 289051 B6, EP 723011 B1, DE 69430919 E, KR 337959 B, SK 283369 B6

Using default format because multiple data bases are involved.

L3: Entry 11 of 11

File: DWPI

Apr 16, 2002

DERWENT-ACC-NO: 1995-106843

DERWENT-WEEK: 200382

COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Variant of phospho-enol pyruvate carboxylase - not substantially inhibited by aspartic acid, is used for efficient production of amino acids

INVENTOR: IZUI, K; MATSUI, H ; SUGIMOTO, M ; SUZUKI, T ; HIROSHI, M ; MASAKAZU, S ; TOMOKO, S ; TOYAMA, T ; MATSUI, H H

PRIORITY-DATA: 1994JP-0153876 (July 5, 1994), 1993JP-0209775 (August 24, 1993), 1993JP-0209776 (August 24, 1993)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>PH 1199448842 B1</u>	April 16, 2002		000	C12N015/00
<u>WO 9506114 A1</u>	March 2, 1995	J	077	C12N009/88
<u>AU 9480991 A</u>	March 21, 1995		000	C12N009/88
<u>JP 07111890 A</u>	May 2, 1995		016	C12N009/00
<u>JP 08070860 A</u>	March 19, 1996		026	C12N009/00
<u>CZ 9600524 A3</u>	June 12, 1996		000	C12N009/88
<u>EP 723011 A1</u>	July 24, 1996	E	050	C12N009/88
<u>SK 9600204 A3</u>	November 6, 1996		000	C12N009/88
<u>BR 9407625 A</u>	January 21, 1997		000	C12N009/88
<u>AU 682547 B</u>	October 9, 1997		000	C12N009/88
<u>CN 1133615 A</u>	October 16, 1996		000	C12N009/88
<u>EP 723011 A4</u>	January 1, 1997		000	C12N009/88
<u>US 5876983 A</u>	March 2, 1999		000	C12P013/04
<u>US 5919694 A</u>	July 6, 1999		000	C07H021/04
<u>JP 3013711 B2</u>	February 28, 2000		016	C12N009/00
<u>RU 2133772 C1</u>	July 27, 1999		000	C12N009/88
<u>MX 195842 B</u>	April 4, 2000		000	C07H021/004
<u>HU 219600 B</u>	May 28, 2001		000	C12N009/88
<u>CZ 289051 B6</u>	October 17, 2001		000	C12N009/88

<u>EP 723011 B1</u>	July 3, 2002	E	000	C12N009/88
<u>DE 69430919 E</u>	August 8, 2002		000	C12N009/88
<u>KR 337959 B</u>	November 23, 2002		000	C12N009/88
<u>SK 283369 B6</u>	June 3, 2003		000	C12N009/88

C1 , MX 195842 B INT-CL (IPC): C07H 21/004; C07H 21/04; C12N 1/020; C12N 1/20; C12N 1/21; C12N 9/00; C12N 9/18; C12N 9/88; C12N 15/00; C12N 15/03; C12N 15/09; C12N 15/11; C12N 15/52; C12P 13/04; C12P 13/06; C12P 13/08; C12P 13/10; C12P 13/12 ; C12P 13/14; C12P 13/24; C12N 1/21; C12R 1/01; C12N 1/21; C12R 1/185; C12N 9/00; C12R 1/01; C12N 9/00; C12R 1/185; C12P 13/06; C12R 1/185; C12P 13/06; C12R 1/01; C12P 13/08; C12R 1/01; C12P 13/10; C12R 1/185; C12P 13/10; C12R 1/01; C12P 13/12; C12R 1/185; C12P 13/14; C12R 1/185; C12P 13/14 ; C12R 1/01; C12P 13/24; C12R 1/185; C12P 13/24; C12R 1/01; C12N 9/00; C12R 1/185; C12N 9/00; C12R 1/01; C12N 1/21; C12R 1/185; C12N 1/21; C12R 1/01; C12N 15/09; C12R 1/185; C12P 13/06; C12R 1/185; C12P 13/06; C12R 1/01; C12P 13/08; C12R 1/185; C12P 13/08; C12R 1/01; C12N 9/00; C12R 1/01; C12N 15/09; C12R 1/185

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Search](#) | [Print](#) | [Bkwd Refs](#) | [Claims](#) | [KMC](#) | [Drawn D](#)

[Clear](#) | [Generate Collection](#) | [Print](#) | [Fwd Refs](#) | [Bkwd Refs](#) | [Generate OACS](#)

Terms	Documents
L2 with inhibition	11

Display Format: [-] [Change Format](#)

[Previous Page](#) [Next Page](#) [Go to Doc#](#)

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
18 April 2002 (18.04.2002)

PCT

(10) International Publication Number
WO 02/31158 A2

(51) International Patent Classification⁷: C12N 15/52, 9/00, C12P 13/04, 13/08, C12N 1/21 // (C12N 1/21, C12R 1:15)

(21) International Application Number: PCT/US01/31893

(22) International Filing Date: 12 October 2001 (12.10.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/239,913 13 October 2000 (13.10.2000) US

(71) Applicant: ARCHER-DANIELS-MIDLAND COMPANY [US/US]; 4666 Faries Parkway, Decatur, IL 62526 (US).

(72) Inventor: HANKE, Paul, D.; 2565 Autumn Grove Court, Aurora, IL 60504 (US).

(74) Agents: LUDWIG, Steven, R. et al.; Sterne, Kessler, Goldstein & Fox P.L.L.C., Suite 600, 1100 New York Avenue, N.W., Washington, DC 20005-3934 (US).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.

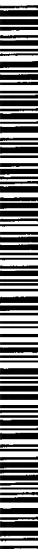
(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

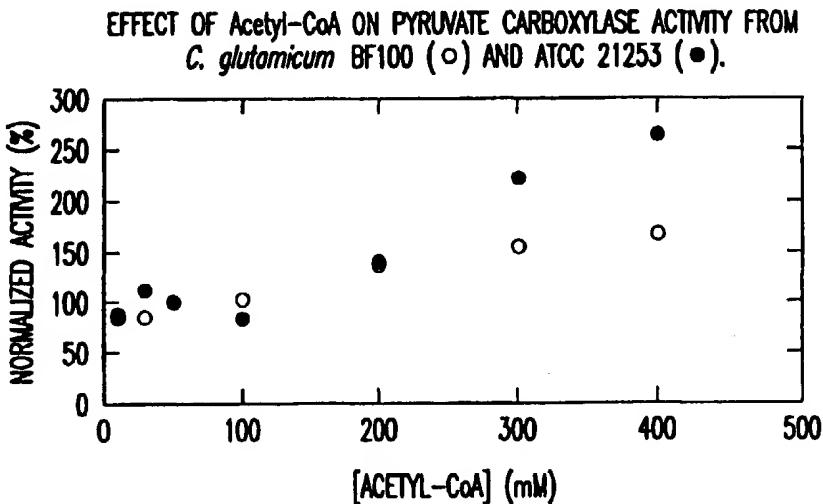
- without international search report and to be republished upon receipt of that report
- with (an) indication(s) in relation to deposited biological material furnished under Rule 13bis separately from the description

[Continued on next page]

(54) Title: FEEDBACK-RESISTANT PYRUVATE CARBOXYLASE GENE FROM CORYNEBACTERIUM



WO 02/31158 A2



(57) Abstract: The present invention relates to a mutated pyruvate carboxylase gene from *Corynebacterium*. The mutant pyruvate carboxylase gene encodes a pyruvate carboxylase enzyme which is resistant to feedback inhibition from aspartic acid. The present invention also relates to a method of replacing the wild-type pyruvate carboxylase gene in *Corynebacterium* with this feedback-resistant pyruvate carboxylase gene. The present invention further relates to methods of the production of amino acids, preferably lysine, comprising the use of this mutant pyruvate carboxylase enzyme in microorganisms.